THE JOURNAL

OF

POLITICAL ECONOMY

VOLUME 24 — *April 1916* — NUMBER 4

FETTER'S "ECONOMIC PRINCIPLES"[1]

Nothing from Professor Fetter's pen can fail to claim the attention of all economists interested in the later development of that type of economic thinking termed, equally by its advocates and by its critics, the *modern theory*. To few among later workers, if to any, does the growth of the science owe larger or better service —criticism more illuminating and destructive, analysis more thorough and profound, suggestion more tantalizing and promising, constructive contributions more enduring or more substantial. It is, indeed, precisely the worth and the promise of the things which Fetter has achieved that prescribe the nature of my task as reviewer —such adequate report of his positions as I may render, and, therewith, such contributory analysis and such relevant criticism as may lie within my power.

As was to be expected, Fetter's book is altogether admirable in its logical structure and in the clear and orderly progress of the argument. Beginning with Part I, discussing the "Elements of Value and Price"—the problem of the price adjustment of immediately consumables, goods of direct service—the exposition moves, in Part II, to the derivation and fixation of the prices of intermediate goods—goods of indirect ministry to human desires.

[1] *Economic Principles*, Vol. I. By Frank A. Fetter. New York: Century Co., 1915. 8vo, pp. ix+523.

Part III applies the principles of price to the question of "Valuable Human Services and Wages"; Part IV, "Time Value and Interest," carries the argument forward to the discussion of the effects of time and of time-preference upon the exchange relations and the prices of durable goods and of goods of postponed service. Only in Part V are the functions of the *entrepreneur* and the determination of *profit* and the discussion of business costs ready for consideration. Part VI has to do with "Dynamic Changes in Economic Society"—population, restricted land supply, modifications of industrial technique, habits of saving, and the like.

The guiding thread of the discussion, the principle of its organization, is, then, quite obviously a theory of value—or of price. Values, or prices, are presented as derivative from human desires. The prices of all agents and instruments are reflected back from the prices of their products. These products, in turn, find not only the reason for their existence—their motive-cause—but also their price determination, in the desires to which they minister. The theory is, then, an unmitigated utility theory of price—or, perhaps not quite so clearly, a demand theory. In this sense it is essentially Austrian, though even less attention than with most of the Austrian writers is devoted to considerations of supply and of cost. Significant of this emphasis is the fact that Cost of Production as related to competitive price is discussed by Fetter in only one chapter of thirteen pages, out of six chapters and sixty-four pages, devoted, under Part V, to "Enterprise and Profit," in a book totalling 513 pages, and made up of thirty-nine chapters.

Cost, in turn, so far as it gets discussed at all, is presented—in full conformity with the utility explanation of values and prices—as merely a displacement of alternative utilities. So presented, cost of production becomes merely a systematic application of the opportunity-cost principle—interpreted, however, solely in an aggregate and social sense, place or room being explicitly denied to opportunity cost on the entrepreneur level of analysis. Thus:

"Products have value not because a certain kind of labor has been put into them, but rather a certain kind and duration of labor has been put into them because of the expectation that the products will have a certain value" (p. 202). "The value (or price) of the factors (that is, the cost) is being marked up

(or down) according to the price of the products, and not *vice versa*" (p. 352). "The total cost is simply the sum of the prices of the factors. But how did the factors, the various qualities of labor, the materials, use of agents, etc., get their price? . . . . From the value of the expected products, or uses. . . . . His costs determine whether or not *he* can make a profit, but they do not determine the prices of the products. Rather, they are seen to be determined by the prices" (p. 352). "The demand for any factor entering into products is reflected, in an increased price, to its cost in all competing products" (p. 355). "In countless ways, the values of products of widely different kinds mutually influence each other [one another?]. The value of . . . . one is . . . . ultimately only the reflection of its relative importance in meeting the desires of men in view of the whole situation" (p. 355). "Wages paid . . . . rest on the same causes of value as does the bargain for material instruments, ... that is, on the direct or indirect effect of labor in the gratifying of desires" (p. 222). "The cost is itself fixed by a larger group of influences, the demand for a factor in the totality of its uses" (p. 356). "The genesis of the value of ultimate factors is found in the value of the product" (p. 355).

Entirely in harmony with the deduction of price in general from utility in general, and of the prices of intermediate from the prices of ultimate products, and in harmony, also, with the interpretation of cost as opportunity cost in the aggregate or social sense, is that aggregate and ethical point of view from which Fetter delimits the field of economic science. Doubtless "the fundamental principles of value and price apply fully to labor. . . . . But . . . . it will not do to say, 'The law of wages? Labor is a commodity, that's all.' . . . . In the social applications of economics, wealth is always but a means to an end, whereas man is both a means (as laborer) and the end itself (human welfare)" (p. 225).

Fetter reports himself as conscious of "the unfortunate confusion of the individual with the social point of view," and mentions this, together with the fact that "economics is often defined as the science of wealth," as explaining that economics has been characterized as a "gospel of mammon." But "in the main, economics must be understood as a social study for social ends . . . . the individual . . . . recognized, but treated as within, and subordinate to, the larger social interests" (p. 9).

This confusion of standpoints regards not so much, perhaps, the objective phenomena to be studied, the necessity of keeping appreciation and appraisal separate from fact and description, as

the very nature of science itself. That the ultimate purpose of a study may be human welfare (this is equally true of astronomy, or of chemistry) does not extend the field of the particular science to embrace considerations of welfare. The failure to keep distinct economics as science from economics as art leads everywhere to confusion between the objective facts and their ethical significance. So, when Fetter insists that "labor is more than a commodity" like any other, he means, we must believe, not that in fact it is so different, but that human welfare prescribes that it should be. Perhaps, then, it is primarily with the purpose of occasional excursions into normative fields—advice, edification, and exhortation—that Fetter defines economics as "the study of the material world and of the activities and mutual relations of men so far as all these are the objective conditions to the gratification and to the welfare of men" (p. 3). Sociologists and other preachers will take due notice.

Expediently, here, if not quite logically, we may stop to question what Fetter means by restricting economic science to the study of the *material* world. Nothing very serious. Elsewhere he remarks:

"Whether labor is embodied or is not embodied in material form, its economic significance lies in the fact that, like wealth, it provides valuable uses (services) to men; that is, it contributes to income" (p. 173). "The distinction in question ["whether or not the service has for a moment embodied itself in material form"] is not now made by most economists. But a similar distinction is inconsistently preserved by many writers who call unproductive the goods yielding direct enjoyment (houses, carriages, etc.), and call only those material agents productive (as tools, machines, etc.) whose product is embodied for a time in material form. If a distinction is to be made between productive and unproductive labor, it will have to be found in the occasional contradiction between value and utility; that is, in the result of labor as regards social welfare" (p. 174, note). "Many choices made by men are not directed to securing material objects. . . . . We are dealing here with things which are in the realm of feeling . . . . psychic income . . . . desirable results produced in the realm of feeling" (p. 27). "Man's psychic life is the thing which is of ultimate concern to him, and all these things appeal to him because of their relation to that complex of sensations and feelings of which his psychic life is composed" (p. 28).

What, then, does Fetter mean by "material," in such sense that the natural sciences "deal with material things and their mutual relations" (p. 3) in contrast with economics, which deals with the relations of material things to men and of men to one another? He means merely non-human, or economic—"men in two sets of relations . . . . on the one hand of man to material (non-human) things about him, and on the other hand to other men with whom he has 'economic' dealings" (p. 6). Economics becomes, then, a study of the economic world and of the economic relations therein of men to one another.

Fetter, it may be remembered, declines to recognize *value* in the sense of *price* as the unifying concept in the science. His own treatise is, indeed, almost exclusively a theory of value, but not of value exclusively in the sense of price—though very often in this meaning—more often, however, as meaning various and sundry other things. Value, therefore, in all the different senses in which he uses the term, may be taken as, in his view, delimiting the field of economics. The price delimitation he has elsewhere denounced as "at once introducing many troubles . . . . is, indeed, most reactionary."[1]

Practically, at any rate, Fetter's entire discussion turns about problems of value and of price, as the very nature of his task and of his general manner of approach prescribes. His "first purpose . . . . has been to make the statement of principles fit the practical needs of our society as it is now . . . . rather than as it was in England in 1815" (p. viii). For many purposes, then, as with most economists, *value* and *price* become interchangeable terms: "Price is the good given by a buyer in a trade" (p. 45). "Money . . . . becomes the common denominator of prices" (p. 262). Pages 50–72 are devoted to a consideration of money and markets and of the process of price fixation, the "equilibrium price." It should, however, be added that, while Fetter proceeds upon the basis of money as the price thing, he makes it clear that "all the essential features" of what he calls *the valuation process* "are possible without reference to money" (p. 51). Money is any *quid pro quo;* "but the great

[1] *Journal of Political Economy*, June, 1915, pp. 554–55.

bulk of the trade of the world is effected through the instrumentality of money (and credit) and prices are nearly always quoted in money terms. . . . . So . . . . it is natural for us to look for concrete illustrations of trade and of price to the money transactions which are taking place around us all the time. . . . . Moreover, ... the explanation . . . . is simplified" (pp. 51–52). This presentation is as admirable as it is unquestioned. Such criticisms as it may merit refer solely to his explanation of the actual market process, to his disregard of the implications that necessarily arise from accepting this as an actual process, and to the terms and conceptions which he employs in the analysis of it.

It is thus important, to the extent that it is possible, to make clear the meanings of Fetter's terms as he uses them. His departures from current usage are many. *Utility* he allows small place in the discussion. In the main, he avoids the term, and in the rare cases in which he uses it, employs it in a quite peculiar and novel sense. He would "eliminate entirely the old utilitarianism and hedonism which have tainted the terms and conceptions of value ever since the days of Bentham" (p. ix). "Utility properly expresses the idea of the fitness (a quality) of things to conduce to real welfare. . . . . Throughout, we shall connect the idea of value with choice and not with utility" (p. 25). "Many of the services valued highly are of a sort distinctly not of utility. Some services are highly valued for gratifying the aesthetic tastes of a few (luxurious decorations, operatic singing, epicurean tastes in food, etc.); others for pandering to the vices of the many (drinking, gambling, licentiousness)[1]" (p. 231, note).

[1] If any of these condemnations, e.g., of decorations, or of opera-singing, should strike some individuals as unduly severe or even as puritanical, the issue really need not matter. Whenever, as in this note on p. 231, Fetter speaks of *utility*, he is avowedly presenting and expressing not a precise objective fact or a scientific distinction, but merely his own notions and approvals of the relation of the facts under consideration to the interests of *real welfare*. Thus he disposes of the term utility by finding a use for it outside the requirements or limits of factual or objective phenomena. *Utility* stands, therefore, merely as a category of edification—Methodist rules of church discipline, principles of Christian living, dietary guidance, and similar counselings of the wholesome and infallible mind. Together with his notions about operatic singing Fetter might have reported—but did not—his personal convictions and pronounce-

It is not to be questioned that the earlier economists, with most of the later, have been grossly addicted to hedonism. But the harm of it all is not so clear. There need be none for those economists who, in the main—as does Fetter—find no occasion to go back of the facts of desire and of choices among the things desired. No psychological economist, or any other, is concerned to commit himself to any view more controversial than merely that men have actually wants and needs—desires—and do somehow come to make choices among the things desired as ends and among the things employed as means. No theory of desire nor any genetic account of its derivation is essential to the case. Habit, imitation, instinct—there is room for all within the simple assertions *one*

ments upon ragtime, circuses, movie shows, beer, cards, dancing, tobacco, doughnuts, and pie. One may, however, for further light on these questions, readily turn to p. 476, in and about which page much is said of *luxury* and of *happiness*, and the *simple life*, the *tired faculties of the Sybarite*, *senses robbed of their fineness*, *youth blasé*, *manhood ennuied*, and *life empty*. In such case, comfort should attend the authoritative assurance that "character is a harmony of actions," and that "the wise and moral use of goods and the economic use of them have much in common"; that in the large "the use of great wealth takes more social directions . . . . and benefits the community"; that "no hard line can be drawn between comforts and luxuries"; luxuries may be often "an incentive to progress. The lower social grades, emulous of the higher standard held before them, labor with greater energy; there is a divine discontent absolutely indispensable if energy and enterprise are to be called into being." "Here . . . . as elsewhere . . . . forces are always at work to keep value in some measure of accord with utility in the world as a whole, and in the long run" (p. 231)—faith sufficiently supplementing science for that seeker of comfort with whom piety guides the quest and faith claims its promised boon.

In this connection, also, one wonders how Fetter goes about the justification for using the term *utility* at all. So hedonistic in its connotations is it as to be obnoxious in its accepted and traditional employment in economic analysis with relation to desire. But, among its various aspects, hedonism posits happiness, not only as the goal of effort, but as the criterion of ethical worth. In Fetter's solicitude to shake himself and his fellow-economists free from hedonism as a theory of desire, and so denouncing the term "utility" in this economic aspect, he transfers it by special election to the field of ethical criteria, thus arriving at all the advantages of an expurgated economic terminology, but this only on terms of imposing upon ethics a distinct certification of hedonism as the ultimate test and criterion of the worth of conduct. If, however, this was gratuitous, it is still to the purpose as indicating that Fetter is, after all, in point of his interests and loyalties, an economist and a scientist, rather than an exhorter or a specialist in social welfare. All things, even the most sacred, he will, upon necessity, sacrifice in achieving a correct analysis of value and of price.

wants and *one chooses*. Even to say that one chooses in the direction of the stronger desire is tautology, since choice is merely the fact of the stronger desire. Fetter is commendably cautious on this question. "There is in our desires for things an impulsive or an instinctive element" (p. 25). "Every valuation . . . . involves a comparison of two things" (p. 89). "Choices are not always and entirely the result of deliberate and conscious calculation. They are determined in a very great degree by habit or by instinct. . . . . The chick picks its way out of the shell, and then instinctively (by its inborn nature) picks at any particle it sees" (p. 13).[1] But, if so much as this is clear, the advantage must be small in abandoning a term of long and thoroughly established usage. And even were it worth the trouble to convert from their error that majority of economists who still benightedly, obstinately, and, in the main, unconsciously, cling to their hedonism, what shall be done if they will not be converted? Shall there be a different terminology for each of the disciples of the various warring psychological and ethical schools? Or shall those folk who mistakenly disagree with Fetter and Davenport give up their foolishness, and, blinded by the new light, accept that which they have not yet received? Or shall the first volume of the coming final work in economics devote itself to the establishment of certain doctrines in the field of philosophy and psychology, by the compulsion of which there shall no more anywhere be division or change in the ultimates of psychological theory? Utility has come to connote neither beatitude nor wisdom, but mere desire—the fact of *wantedness*. Why not be content with it so?

But equally clear is it, especially if it does not greatly matter anyway, that some other term might adequately fill the need, avoiding at the same time all disturbing connotations. So be it, then. But what shall be the term? And, precisely, what does Fetter offer? *Utility* being relegated to the function of expressing the approval of the particular individual who happens to have the

[1] No one could possibly claim any monopoly of chickens; so again, boys hungry for candy, with their noses against the glass of the candy-shop, are as much everybody's property as anybody's.

floor or to wield the pen, we still have this better term to seek. With Fetter's decision to have none of *utility*, and still less of *marginal utility*, what will he have, and what does he offer? This question necessitates an examination, not merely of Fetter's terminology, but of the fundamentals of his value theory. Terms and concepts are tests of doctrines, and, in turn, are tested by doctrines.

Goods, we are assured, are *free* and *economic*. "Free goods . . . . are things which exist in superfluity. . . . . They have no value in the sense in which the economist uses the term. . . . . Even such as are indispensable to existence may yet, because of their abundance, fail to be objects of desire and choice. Though we must have air to live . . . . so long as it is present in abundance, the desire for it . . . . remains constantly at the zero point" (p. 23). Set over into traditional terms, this would mean that whenever the supply of a needed thing outruns the need—when some item must go unused and unusable, some item fail to find a need, and some, therefore, lack utility—none has utility. The sum of their desire-satisfying power is nil, because not all can find a desire to satisfy. All may have utility, if there be not one too many. None may have utility unless all have. But obviously, some explanation must be had for the fact that things which exist in superfluity command no sacrifice, do not need to be economized, cause us no worry, and attract little or none of our attention. Perhaps the term "economic goods" comes in good stead here—the goods which must be economized, which we would make sacrifices for if we had to—mayhap would pay for—but goods for which we do not have to sacrifice or to pay. But shall it be said that one does not desire a glass of water—that it gives him no *satisfaction*, responds to no desire—if it can be had for nothing? In fact, however, this is not Fetter's own view as expressed on other pages, but only his present view. The things which satisfy desire need not take on value—do not—unless there is "scarcity . . . . such a limitation . . . . that not all desires can be met then and there by the amount of goods available" (p. 14). But is there no desire in such cases? When all desires can be met, all desires cease to exist? "The hungry boy represents mere desire" (p. 46), but

represents not even this, if there is more food available at the home table than he can eat? The food lacks serviceability, desire-satisfying quality? When Uncle Sam is prodigally generous, are the reservation Indians without desires, and the supplies awarded them without utility—utility in the old, and forbidden, sense? What is to be made of the legend that a hungry man—or perhaps a dog—finds his mouth to water as he scents his food? Or is this only when he realizes that, after all, he is not to have it, or that there is not enough for a full meal?

In fact, however, as has been already indicated, Fetter is not entirely consistent in the view that one can be sure that he has a desire only after finding out the terms on which it can be satisfied, and that the smaller the prospect of satisfaction, the greater the desire: "As the days and hours succeed each other in the life of man, they bring with them a constant succession of desires, forming an endless stream so long as life endures. To meet and satisfy these desires a corresponding stream of goods is necessary" (p. 103). But on the whole it appears that each particular desire has always a changing intensity accordingly as is the prospect of its getting satisfied—the greater as the outlook is bad, the smaller as the outlook is better. "True, in advance of using the goods, we say that some of the desires are more intense than the others. But when we begin with a stock of homogeneous units this difference must disappear. For we will begin by applying the goods first to the more intense desires. [Eat all our food supply of grain before we plant any? Wait till we shoot the tiger before we use any of our cartridges for rabbits?] And, as we have just seen, this reduces their intensity. We then apply the goods to the desires formerly ranking next in intensity, and so successively. . . . . And as they [the desires] fall in intensity, we take in, one after another, the desires which at first were less intense" (p. 37).

Clearly, the desire changes—and changes inversely—with the quantity of the goods available. But, if so, if all desires arrive at one and the same level of intensity, the marginal level of lowness, what becomes of Fetter's doctrine that the "market price is that price . . . . which permits the maximum number of trans-

fers, with some gain to both parties" (p. 66)? How can there be any seller's surplus?

This doctrine that the intensity of the desire for a thing—what Fetter here calls its *value*—is determined by the supply of it, may later cause Fetter some difficulty in his attempt to deduce market values (prices) from the utility side of the case. With the volume of supply determining the *value*, something will have to be said as to the forces determining the supply. But if it be true that desirability—or desiredness, or *value*—falls as the supply increases, it should be easy to discover that the larger the supply the smaller the value. So (on p. 38), Fetter finds that the total *value* of an individual's stock of goods, the total intensity with which he desires it, is found by multiplying the marginal desirability by the sum of goods: "In the case of a stock of 10 units, the *marginal valuation* (value per unit) is 36. The value then ascribed to the whole stock will be 360 (represented . . . . by the rectangle)." Thus he concludes that the intensity with which a stock of 60 goods is desired is 300, whereas, if the stock were only 10 goods, the total desiredness would be 360. Whence it would seem to follow that you could buy out a farmer's total stock of 60 bushels of corn at the same price per bushel at which you could buy a single bushel, or his whole stock of 60 bushels at $60 less than if the entire stock were only 10 bushels. This, one might, with Fetter, well call the "paradox of value" (p. 39) were it, in fact, more than a mere confusion of *utility* with *value*.[1]

It must in fairness be admitted that this is probably not a fair interpretation of Fetter's ultimate position. He is trying to get along without the term "utility" or "marginal utility," and finds no other term or concept to his purpose. Recall from his foreword that he "presents here quite a new statement of the theory of value, one in accord with the modern volitional psychology—eliminating entirely the old utilitarianism and hedonism. The basis of value is conceived to be the simple act of choice." Thus,

[1] But note the following, on p. 307, with regard to lending: "The motive exists only with respect to certain marginal units. . . . . A could not give up *all* his control over income . . . . for 13 per cent for that would mean greater deprivation than he chooses to make."

if value is conceived as something directly attaching to desire, and as falling with every increasing stock of goods, desire must, somehow, be found to fall with the falling stock. Not at all that this is a necessary line of reasoning, but the older and well-established line is suspect, is too obviously Austrian. Subjected to the exigencies of his novel terminology, Fetter is trying to present the substance of the traditional doctrine which holds that, as a stock of interchangeable items increases, the significance or importance attaching to any single item falls, since the least pressing among the desires to be satisfied out of the entire stock must be the desire frustrated by the loss of any one item out of the stock. The familiar concept of marginal utility is, indeed, a direct inference from the law of falling utility. In substance, marginal utility is interchangeable with *subjective Wert* (*worth*) in the Austrian terminology. But obviously this view implies and asserts the existence of a series of desires of different intensities, instead of the equal intensity of all the desires at the level of the weakest of all.

Whether the authorities especially concerned will be disposed to accept responsibility here for Fetter's analysis presented and recommended as "one in accord with the modern volitional psychology" need not seriously concern us. In any case it does not accord with the facts of economic affairs. It has, however, an evident doctrinal purpose in Fetter's logic. Price, we recall, was to be derived from desire—things exchanging against one another in proportion to the intensity with which they are desired—"the value . . . . only the reflection of its relative importance in meeting the desires of men in view of the whole situation" (p. 355). Thus it is obvious, as we have already seen, that, if value is to be directly attached to desire, with the price proportional to the intensity of the desire to be served, something will have to be done with the fact that the value of a good falls with a larger supply of it. Fetter comes, then, under the necessity of somehow showing that the desire falls along with the falling value. He must argue that the more of the good the smaller the desire for it and for each and every item of it. To solve the problem by an appeal to utility in its marginal aspect would have involved various and unwelcome burdens—an established analysis, a traditional terminology, an Austrian doctrine.

Fetter's task was, in truth, a thing not lightly to be undertaken—the making of a new system of terms—even though the task itself need not be more complicated than the making of a new card game through a redistribution of the values of the cards. But one comes, then, under the necessity of using his own new terms, when once he has invented them, and of getting along, somehow, without stumbling over himself, or over them, in the process. In fact, the chief defects in Fetter's value analysis—and there are more of them to come—mainly center about the fact that, in his solicitude for the science of economics that it be disburdened of hedonism—even at the cost of transferring the greater burden of hedonistic connotations upon ethics—he dismisses the term *utility* from the price analysis; but, once rid of it, succeeds in finding nothing in its stead. The result is a lamentable confusion both of terms and of thought. Still other terms, many of them of traditional and specialized use in other meanings, are made in turn to fill the gap left by the departure of utility—value, desirability, importance, significance, serviceability, gratification, satisfaction, desire, marginal desire, psychic income, and the like. Especially unfortunate, however, is it that in an investigation in which *value* in the sense of a rate of exchange is the central and ultimate problem, this very term *value* is made the chief burden-bearer in all the intermediate steps of the analysis. So far, indeed, as *value* gets defined, it is in the sense of this subordinate and tributary use—desiredness in the non-relative aspect—the *utility*, or perhaps the *marginal utility* of traditional usage. "The quality of importance which things have when they are the subject of man's choice is *value*" (p. 19).[1]

[1] Clearly, however, value in the relational sense in which it can be made to be "fundamentally a reflection of the individual choice" (p. 19) is not safely to be termed a quality. In truth, the already existing ambiguities and multiple duties of *value* and *valuation* should have afforded sufficient warning against the acceptance and extension of the gratuitous confusions attendant upon attaching to it further duties. Always there is implicit in the technical economic use of the term the notion of rate, or ratio, or relatedness, in the sense in which Fetter declares that "every valuation . . . . is a comparison of two things" (p. 89). Perhaps *worth*, as less definitely specialized to the notion of ratio or comparison, might serve for value in any non-relational sense. *Wert*, it is true, does sometimes, in German usage, mean merely the objective fact of *market value*—the exchange rate between different goods; sometimes, also, it is the equivalent

And precisely because of this prevailing confusion, it is well-nigh impossible to make certain of Fetter's meaning in any particular connection. All sorts of sleights of hand in logic occur—these often as much at his own expense as at that of the reader or critic.

I am aware of the seeming of unwarranted severity, and even of dogmatism or discourtesy, in the foregoing. If, therefore, there be proof of it, it must be promptly forthcoming. I stop merely to insist that the larger issues of economic doctrine turn

of *marginal utility—worth*, as mere subjective significance or importance; sometimes again, the comparative worths of different things—their relative significance or importance, *subjective value*. But the English language is, for this purpose, rich enough in terms to avoid either the necessity or the temptation of two or more technical meanings for one term.

Thus *utility* must be clearly distinguished from *marginal utility*, "*subjective Wert*," and the latter equally clearly from *subjective value*. The importance of any item from a stock of interchangeable goods depends, not upon its utility, the degree of intensity in the desire to which it ministers, but upon the intensity of the desire which will be thwarted by the fact that one item is lost. The *Grenz-Nutzen* of German usage is merely *marginal utility—subjective worth*. The comparison of *subjective worths* gives *valuation*. When, for example, Boehm-Bawerk "advisedly, and with casuistic caution" defines subjective *Wert* as "that importance which a good, or complex of goods, as the condition of an otherwise absent utility, acquires for the well-being of an individual; . . . . the measure [degree, *das Mass*] of the dependent service is everywhere the measure (*Mass*) of the *Wert* of the good" (Boehm-Bawerk, *Grundzüge der Theorie des wirtschaftlichen Werts*, p. 4), it must be understood that in this concept of *Wert* there goes nothing of the comparative or relational character. When subjective worths, or marginal utilities, are regarded by an individual in relation to each other—are subjectively compared, their relative importance to him estimated or expressed—there occurs the process of subjective *valuation*, and the result, a *subjective value*. It is obviously only by this process of a more or less definite comparison of subjective worths—of the marginal utilities of the various objects purchasable by his money—that the individual comes to have a price offer for any good, and, therefore, to afford an item of demand.

By this device of translating the two meanings of the German *Wert* into *worth* and *value*, according to the particular occasion, it is easy to avoid those shiftings of meanings so grievously numerous in the Austrian analysis of *Wert* in both its relational and its non-relational senses. But even subject to this caution, it still remains true that the uses of the English word *value*, both in popular discussion and in economic discussion outside of the price analysis, are so various, and the shifts so many, that confusion is always invited.

Still clearer is it that, in making *value* serve as the usual substitute for *utility*, Fetter has merely succeeded in multiplying confusions already more than serious enough.

on questions of precisely the sort under present examination—pain cost theory, utility theory, marginal expense, marginal pain, marginal price, and marginal pleasure theories of the determination of price. These issues are, indeed, worlds away from mere meticulous refinement, intellectual gymnastic, or empty logic-chopping.

Value means price.

Often enough, as with most economists, Fetter means by *value* merely *price*, that particular value relation in which money is the *quid pro quo*, practically the sole among the possible different value relations to become actual in the market process of exchange. *Price* is only the money *value* of a thing, one of its many values, since money is only one of the possible *quid pro quo*'s. Thus:

"Buying as cheaply . . . . and selling as dearly as they can . . . . each man fits his *valuation* to the market . . . . finds an established price, and . . . . can . . . . buy or refuse to buy, sell or refuse to sell, at that price" (p. 273).[1] "Whatever *price* is paid for the ownership, the *price* of the series of incomes . . . . the *value* of the permanent possession of the estate, is thought of as a certain number of times the *value* of the income secured" (p. 274). "That on which the *value* of the goods as a whole is based is a series of uses. . . . . Each succeeding year's use . . . . is reduced to a present worth, and the sum of the present worths is the present *value* of the agent" (p. 268). "If, to save another trip, a wagon is too heavily loaded, it is strained or broken. . . . . A sudden rise in the *value* of the product may warrant the sacrifice" (p. 260). "If half of the apples probably will rot . . . . the present *value* of the future apples, per bushel, must be somewhat more than twice as great as present apples, to make a motive for keeping them and further allowances must be made for trouble, *expense*, etc." (p. 245). "There is a constant bidding for factors, and through their *prices* . . . . in countless ways the *values* of products of widely different kinds mutually influence each other [one another]. The *value* of no one is an isolated fact. . . . . The demand for any factor entering into products is reflected, in an increased *price*, to its *cost* in all competing products. . . . . The enterpriser's *cost* is therefore the reflection of the ultimate *prices* of the productive agents in all its other uses as well as in the particular product" (pp. 355–56). "The increase in *value* which is expected to result . . . . gives the motive for bringing the changes about. If grain were not, to someone, more valuable in Liverpool than in New York, there would

[1] Italics are the reviewer's, as in most other of the citations made. And it should be noted that not rarely, in the interests of clarity and of space, the sequence of sentences has been changed—always, it is hoped, with due caution against misinterpretation.

be nothing to gain in shipping it" (p. 95). "The *wage* . . . . obtained by a man for his labor is the reflection of the *value* of that labor to his employer, and, eventually, to the user of the product" (p. 137). If a small crop is raised, the *value* of most of the uses of the land . . . . would be entirely thrown away. . . . . There lies a point . . . . where, by aiming to raise either less or more, the man in charge gets a smaller net return (surplus of total *price* over expenses). . . . . Why not have more tools? Because they *cost*. . . . . A balance is struck at a point where the last additional tool adds to the *price* of the crop at least as much as the tool *costs*" (pp. 132–33). "Any unit of product . . . . must be *paid for* according to a *value* determined by the *costs* of the factors. . . . . The genesis of the value of ultimate factors is found in the *value* of the product" (p. 355). "The *value* (or *price*) of the factor (that is, the cost) [is] marked up (or down) according to the *price* of the products" (p. 352). "A single product having a single factor shows most clearly the reflection of *value* directly from the product" (p. 353). "When the one factor yields several different kinds of products, ... as anyone wishing the factor for any use must bid against the other uses, the factor appears, on a superficial view, to have a *price* already determined by its other uses. But . . . . the *value* in any situation results from all the uses taken together" (p. 353).

Value does not mean price.

"Time *value* bears the same relation to time price that value of direct commodities does to their *price*" (p. 270).

"A clear distinction is drawn throughout this volume between *value* and *price*" (p. ix). "Wherever there is a thing of *value*, there is a chance that a trade will occur, ... and that a *price* will result" (p. 143). "Comparison of *costs* might be made accurately in terms of day's labor provided labor were the only cost and were all of the one kind and *value*" (p. 163). "As the *value* of direct commodities [consumable goods] comes to be expressed in a *price* in sale . . . . so the *value* of any labor . . . . comes to have a *price* called wage or wages" (p. 211).

Value does not mean use, desiredness [utility].

"The whole use of the goods consists of a sum of separable *uses*, capable of being separately *evaluated*" (p. 135). "The *value* of the uses . . . . comes to have a *price* called rent" (p. 211). "Form, weight, texture, ... [color] chemical elements that give a certain flavor and taste . . . . these singly or combined are not *value*, though each has its part in determining . . . . whether the apple is to have also the quality[?] of value" (p. 20).

Value does mean use, desiredness [utility].

"It is the . . . . net present *value* of the future goods that is compared with the *value* of the present goods" (p. 245). [Where] "apples which are

scarce now will be much more plentiful in the future . . . . we feel almost warranted in saying that the *absolute magnitude* of the present *value* is greater than it will be at that future time" (p. 248). "An excluded buyer, if he has anything to trade, shows that he *values* the *price* more than he does the sale-good. . . . . An excluded seller, the owner of the sale-good, retains it because his *desire* for it is stronger," etc. (p. 68). "An agent is *valued* as an agent—as an instrumentality in the gratification of *desire*" (p. 18.)[1] "Wherever there is a thing of *value* there is a chance that trade will occur . . . . and that a *price* will result" (p. 143). "The *values* of products of equal periods of one's own labor have very unequal *values* to the isolated laborer" (p. 202).

Value indicates relative importance.

"Thus, in countless ways, the *values* of products of widely different kinds mutually influence each other. The *value* of no one is an isolated fact, but is ultimately only a reflection of its *relative importance* in meeting the desires of men" (p. 355). [A social-organization way of viewing desire; and yet Fetter has elsewhere remarked that "value is fundamentally a reflection of the individual choice" (p. 19). "The essential meaning of value . . . . is individual, that is, it relates to a particular person" (p. 21). But (p. 212): "goods . . . . are valued by the strength of desires as expressed in choice."] "Crusoe's . . . . labor has no predetermined *value* which can be transferred to, or put into, its material [?] products; rather the various products have an anticipated, expected value, which serves as a guide in apportioning the labor . . . . applied according to *expectation-valuations* (a present valuation of the future desirability)" (p. 201). "Fruit . . . . makes a certain appeal to us, is valued, as compared with anything else. Why?" (p. 235). "Throughout we shall connect the idea of value with choice and not with utility" [in the sense of service to welfare] (p. 25). "We are under the necessity of choosing among the various possibilities . . . . the recurring necessity of comparing one thing with another. . . . . We assess or estimate one thing in terms of the quantity of the other thing. Such an expression of the importance of one object of choice in terms of another we call a *valuation*" (p. 15). "A monetary unit [is] our standard for the expression and comparison of the relative importance of things" (p. 16).

Value is non-relative importance.

"It is the net *desirability* (net present *value*) of the future goods that is compared with the value of the present goods" (p. 245). "The preference of the present may be due to the prospect that apples which are scarce now will be more plentiful in the future; there we feel almost warranted in saying that the *absolute magnitude of the present value* is greater than it will be" (p. 248). "When Crusoe . . . . lets his canoe lie on the beach . . . . this act necessarily

[1] But it is to be recalled that, according to Fetter, there is no desire if there are more than enough goods to satisfy the desire.

implies that . . . . he *values* his own effort to pull it up more than he *values* the dimly seen necessity of bailing it out tomorrow" (p. 250). "The *marginal desire* . . . . expresses the *actual value*. . . . . This is the *marginal valuation*. . . . . Each unit . . . . is of equal value" (p. 38). "If we have a preference for sweet apples, we are likely to rank them as to *value* according to the sweetness. . . . . We come in this way to attach different *values* to the different grades" (p. 32). "Desire is constantly shifting. . . . . Different kinds of goods are at every moment being *re-valued*" (p. 35). "The *quality of importance* which things have when they are the subject of man's choice is *value*. . . . . Value may be of many kinds: moral, religious, esthetic. . . . . Economic *value* is but one of the species of the larger genus of *value*. It is the *quality* in an object . . . . to influence a man's action. . . . . Bread, meat, dress, houses, land, gold, carriages, slaves, the labor of hired servants, each object is said by you to have (economic) *value* just because you feel and know that it sways your behavior in relation to itself" (p. 19). "Each kind of goods and each act of labor is *valued* in accordance with the *psychic income* which it helps to secure" (p. 209). "Form, weight, texture [etc.] . . . . singly, or combined, are not value, though each has its part in determining . . . . whether the apple is to have, also, the *quality of value*" (p. 20).

Value means non-relative marginal desiredness.

Thus "there may be no difference whatever in the present values of the different units of the stock. The principle of indifference applies" (p. 249). "Apples which are scarce now will be more plentiful in the future; there we feel almost warranted in saying that the *absolute magnitude* of the present *value* is greater than it will be" (p. 248). "This relativity of desires and successive gratifications is called the *principle* of *diminishing gratification*" (p. 36). "If the quantity available is so great that absolutely all our desires for it are satisfied, the value of the good will fall to zero. . . . . If . . . . capable of gratifying a part but not all of our desires . . . . value will attach" (p. 36). "The marginal desire . . . . now marks and expresses the actual *value* of each of the other units of the stock. This is the *marginal valuation*" (p. 38). "*Value* is but the abstract *quality* which we attach to a thing in our thought, because of the way it makes us behave in its presence. . . . . Value—the *quality imputed* to the object. . . . . We ascribe this *quality* to the object that motivates our choice. This *quality of importance* which things have when they are the subjects of man's choice is *value*" (p. 19). [Here values are the subjects of choice—the things which are being related, not the relative standing, and not the act of choosing.] "We reach the point where, with the whole series of desires already met, an additional amount finds desire completely lacking and value, therefore, at the zero point" (p. 37). "We then apply goods to the desire formerly ranking next in intensity. . . . . In this way we bring to equality the *values* of all the units. We have come to the limit, or the margin, of the series of desires. . . . . The marginal desire . . . . now marks

and expresses the *actual value* of each of the other units. . . . . This is the marginal *valuation*" (p. 38).

Confusions of choice with desire [valuation with utility, relative with non-relative].

"The logical order is: First, choice; secondly, a valuation by necessary implication; third, value—the *quality* imputed to the object. . . . . Value is fundamentally the reflection of *the* individual *choice*" (p. 19). "Value . . . . is *the quality* in an object . . . . to influence a man's action in respect to the control and use of the object . . . . this *quality* . . . . *that motivates* our *choice*" (p. 19). "In . . . . a choice of a thing . . . . the *valuation* is simply *the resultant of choice* . . . . *reveals* to the person *how he values* the object" (p. 18). "The *quality* of importance which things have when they are the *subject of men's choice* is value" (p. 19).

It is fairly to be said that many out of this long list of typical confusions[1] are due to the peculiar manner in which Fetter has attempted to organize his exposition: "Each of the first four parts begins with the individual aspect of the problem of choice (subjective value) and concludes with a study of the commercial or price aspect" (p. ix). Possibly, then, many of the perplexing shifts and interchanges of the meanings of terms could be explained by a careful noting of the changes in point of view. But equally clear is it that not all of them can be so explained—that the method imposed a task equally beyond the capacity of the expositor, the intelligence of the reader, and the understanding of the critic. The net result, on these terms, is merely that no reader, however sympathetic, nor even the author himself, could make certain of the precise interpretation or limitations to be ascribed to any particular analysis or to any specific formulation of doctrine. Thus no one of Fetter's different formulations of doctrine is to be declared defective or incorrect, if only that particular use, among all the various and different uses of his terms, be selected with which best to interpret and defend his position. It follows that, so far as any articulated value doctrine is to be deduced from his discussion, the specific result attained is merely a matter of one's chosen

[1] For example, *desire* is occasionally confused with *demand:* "To be an economic good human effort must meet either a *desire* in the laborer himself, or a *demand* from some other person" (p. 173).

interpretation or imputation. Only the general trend of interpretation of the doctrine is securely to be asserted. In its main lines, clearly, the analysis parallels the Austrian view and coincides with its conclusions, in point both of merits and of shortcomings. Especially clearly does this assertion hold of the cost of production analysis—of which more later.

Nothing, indeed, is very specifically to be declared of Fetter's position more than that value, in the sense now of *price* now of *marginal utility* and again of *subjective valuation*, is the product of choice. If in this sense the doctrine is psychological, it is so in an entirely admirable, and an entirely uncontroversial sense. All economic reasonings assume that producing, selling, buying, borrowing, lending, saving, consuming, are all individual matters for individual ends—determined, selected, chosen, explicable, only as such. This is as obvious as it is generally admitted, assumed, and applied. No theory of value is true solely by its adoption or new by its announcement. Nor in its mere announcement is there novelty, even of statement. Only in the thoroughness and consistency with which the assumptions common to all economic thought are worked out and applied is there room for theoretical initiative or novelty or originality. There is nothing significant in the mere announcement that value is the result of choice; nor thereby is any value doctrine appreciably advanced beyond its point of beginning. All the essential things are still to come—the working out of an obvious principle into those various bearings and applications which are not at all so obvious and not at all so easy.

It is, then, in part for what Fetter has not done at all, rather than for what he has wrongly done—in part, also, for the gratuitous confusions that he has introduced in the process of doing it—that criticism is due. And, if later, in his analysis of cost of production, his repudiation of opportunity cost turns out to indicate merely that he has forgotten that all economic activity is a matter of choice, and that any decision to produce any one thing, or to sell it, is a manifestation of choice—that how much to produce, what factors to employ, when to expand or contract or suspend production, etc., are all choices, and, in the nature of choice, are choices

of alternatives, no special criticism need attach. As the principle of choice has not been Fetter's discovery, so he is under no special obligation to observe it.

In fact, however, Fetter's doctrine of cost of production is essentially an opportunity-cost doctrine, only that it is defectively applied. But it is significant of his overemphasis upon the utility and demand side of the value problem that what slight discussion of cost he offers comes well along after the book is three-fourths written. Cost is rightly presented as merely an entrepreneur computation. It is through this cost computation, and through the entrepreneur's choices of the direction of his gainful activity that supplies of goods occur. But, if so, the relative expensiveness of supplying goods must inevitably come to bear upon the relative prices which purchasers must pay for them.

There is, then, no way of explaining the marginal utility of a good, or "the marginal strength of desire" for that good, that does not include an explanation of the volume of supply of that good—no way of explaining the relative strength of the marginal desires for different goods that does not explain the relative volumes of supply of those goods. In a society in which production comes about only through the individual attempt at gain, there is therefore no way of explaining the supply of any product but through the total of its price costs—no way of explaining relative supplies but through relative price costs. All this, however, Fetter either implies or quite adequately asserts. But only the more clear is it, then, that the "relative strength of desires" can suffice to explain the exchange relations of things only upon the tacit assumption of their conditions of supply, their relative entrepreneur costs. No explanation, therefore, of exchange value is adequate that takes for granted or regards as irrelevant all supply considerations.

Nor, in fact, would Fetter, or any other Austrian, seriously deny all this. "The actual and essential features of the cost law, viz., that cost regulates the value of reproducible goods, that we commonly appraise the goods directly according to costs, that changes on the side of cost cause change in the level of value, these things

the marginal utility theorists have never in the slightest overlooked or denied."[1] But as the Austrians clearly assert, cost of production can accurately purport to explain price (or value) only in the sense of explaining the prices of the products by the prices of the costs—which is obviously merely to explain one price by other prices—a patent circuity—true, doubtless, if accurately presented, but neither ultimate nor adequate. How, then, explain the prices of the costs? May there not be some process of resolving the costs of each particular product into the displacement of other products, thus establishing that, if it be taken as true that any given product gets its value from its marginal utility, the cost of it, in turn, must be merely the foregoing of other marginal utilities? Precisely this was the Austrian interpretation of cost; precisely this is Fetter's interpretation.

But note again that the demand price of any bidder for any commodity is really fixed, not according to the degree of its marginal utility, but only through the comparison of its marginal utility to that bidder with the marginal utility of some other commodity alternatively purchasable. That one decides to spend a dollar for one thing amounts to saying that, for him, no better use can be made of the money—that the particular marginal utility is at least as great as any other obtainable. The view that price is fixed by marginal utility, or is commensurate with marginal utility, is, therefore, not tenable. And to say that market price is fixed by the marginal price-offer, or is commensurate with the marginal demand—assuming this to be true—leaves this marginal price-offer still to be explained. And, in order to explain it, not one, but two marginal utilities (subjective worths) must be compared. The marginal valuation reported in the marginal price-offer implies not one marginal utility but an equality ratio between two.

Thus on the demand side, while the marginal utility offers an incorrect explanation either of value or of marginal price-offer, the marginal price-offer does not even purport to offer an explanation. But even worse is the situation on the supply side, so long as the attempt is made to invoke cost of production as the explanation of supply. So much as this is easily made clear, though at

[1] Boehm-Bawerk, *Conrad's Jahrbücher*, dritte Folge, III, 321 f.

the cost of some repetition. The error in the identification of marginal utility with marginal earning power is an error precisely parallel to the notion that the prices of consumption goods are fixed by their marginal utilities.[1]

Proceeding, then, from this notion that the price of a consumable good is derived from the marginal utility of the good—expresses it, reflects it, or is determined or expressed or measured by it—the further step is easy. Since the utility of production goods is their earning or producing power, their price also must express their marginal utility in production—their marginal productive power.

What, then, in this view, determines the cost which attaches to the use of any production good? All similar items must command the same price, that price necessary in the market to find purchasers for all. This market price is commensurate with the marginal *demand.* Thereupon this price is declared to be commensurate with the marginal *earning power* and therefore to express the marginal utility of the good in production.

Obviously, however, the price merely expresses the marginal entrepreneur offer, an offer which is marginal merely because at any higher payment something else must be preferred for gain-seeking purposes.

And equally clear is it that the volume of the supply has something to say as to the size of the marginal price bid—so also that changing costs have something to say as to the volume of the supply. Cheaper methods of production—for example, through new

[1] The price of any consumable good must obviously fall low enough so that all the stock can find purchasers. Thus the price necessary to sell the last item out of the entire stock is the price for all the other items. The price is therefore commensurate with the offer of the marginal bidder. In this sense it is clear that price is marginally determined. But the fact that the price is commensurate with the marginal demand is worlds away from indicating that this price is representative of marginal utility anywhere, or expresses it, or is fixed by it. Marginal price-demand and marginal utility are quite different things—as has already been sufficiently indicated. The marginal demand is the result of a comparison of utilities. That bidder is marginal who at the price is at the point of indifference between competing opportunities of purchase—competing marginal utilities. Thus the lowest bidder in terms of price may easily be that bidder to whom the commodity offers the largest utility. That his bid is low is explained by the very fact that other uses for his available purchasing power are also making urgent appeal—offer also large utility.

inventions or more effective processes—enlarge the supply, and therewith lower the prices of the products relatively to other prices. These new processes commonly involve a larger use of certain materials—often, also, the smaller use of others. Therewith the costs of other products are directly affected, their output changed, their prices modified. It is, then, a disastrous error to assert that costs of production do not affect prices—precisely as the prices of products, in turn, affect the prices of the cost items employed. Fetter, however, does not commit this error for more than part of the time. When values are presented as rates of exchange, and costs as expressive of alternative possibilities in production, the better doctrine emerges almost of its own force.

There is, however, another still more serious difficulty in this Austrian analysis, by Fetter completely accepted and followed. The cost price of each item employed in the production of any one commodity is held to be the price which it would command if used in ministering to the demand for some alternative product:

"A point is reached where it does not pay to use any more of an agent in a certain industry; the production of another unit results in a loss because the factors are worth more in other uses. . . . . The value of no one [factor] is an isolated fact, but is ultimately only the reflection of its relative importance in meeting the desires of men in view of the whole situation. . . . . Any unit of product sought for any purpose must be paid for according to a value determined by the costs of the factors under the marginal rule in all the applications. . . . . Products of a higher value outbid and exclude those of a lower. . . . . The demand for any factor . . . . is reflected, in an increased price, to its cost in all competing products. . . . . Any enterprise seeking it for any other use finds its 'cost' affected by its various alternative uses . . . . the . . . . cost is therefore the reflection of the ultimate prices of the productive agents in all its other uses as well as in the particular product. . . . . Cost is itself fixed by a larger group of influences, the demand for the factor in the totality of its uses" (pp. 355–56).[1]

[1] That Fetter's position is essentially the Austrian position is evident: "As the value of each similar sack of corn is determined according to the utility of the sack dispensed with at least sacrifice, so the value . . . . of all production goods is determined generally according to the value of the most easily sacrificed good which will be produced out of the common production store, or, as we call it, according to the marginal utility of the marginal product."—Boehm-Bawerk, "Wert, Kosten und Grenznutzen," *Conrad's Jahrbücher*, dritte Folge, III, p. 321.

"The less material and labor it requires to make a coat, so many the more coats from the same goods; so much the lower down the utility curve can satisfaction

That this doctrine is in no sense original with Fetter is obviously no objection to it, if only it is true. Most doctrines, indeed—Fetter's among others—that are good for anything, accrue by a slow development, and are novel only in details of addition or subtraction. But this particular doctrine is not tenable. It can hardly be the fact that the price in the marginal use is determined

extend, so much the lower the marginal utility of coats. By service to marginal utility the cost goods come to be valued. Not cost, but utility, then is at the end of the causal series."—*Ibid.*, p. 310, note.

"The value must be high when the dependent satisfaction is important, and low when it is unimportant."—Boehm-Bawerk, *Positive Theory*, p. 180. [This seems to be a subjective value formulation, and, as such, needs, perhaps, no criticism for lack of relativity; but surely as a market-value formulation the doctrine would require restatement to read: "The value will be high when the dependent satisfaction is relatively important, etc." (Davenport, *Value and Distribution*, p. 354).]

"Experience shows that the value of most goods is equal to their 'costs.' But 'costs' are nothing else than the complex of those productive goods which have value . . . . [and] must be expended in the making of a product."—Boehm-Bawerk, *Positive Theory*, p. 183.

"The *Wert* of goods which have a higher individual marginal utility is put on level with the value of the 'marginal product'—as we shall call that product which has the least marginal utility."—*Ibid.*, p. 187.

"If we are considering what a good . . . . of higher immediate marginal utility is worth for us, we must say first of all, it is worth exactly as much as the means of production from which we could replace it at any moment. Then if we examine further how much the means of production themselves are worth, we come to the utility of the marginal product."—*Ibid.*, p. 188.

"Even where the law of costs holds, costs are not the final but only the intermediate cause of value. . . . . It is only this many-sided character of most cost goods—their capacity for being employed in many different uses—that gives the appearance of the contrary."—*Ibid.*, p. 189.

And to the same effect, von Wieser, only a little worse: "In every stock of consumption goods, every unit receives its value from the marginal utility; thus the value which the products are expected to have is already adjusted to the marginal level, and the value of the production goods, as derived from this, is consequently placed, from the beginning, on the basis of the marginal value."—*Natural Value*, p. 97.

"Productive elements which admit of only one kind of employment do not share the multiplicity of conditions necessary for the emergence of what we recognize as costs."—*Ibid.*, p. 175.

"That the rent of land does not enter into cost can be legitimately applied only to land devoted of necessity to one distinct use, such as mines, vineyards, and the like. . . . . If a fertile field is employed as a site for a factory, the agricultural rent which in other circumstances might be expected from it . . . . cannot be neglected in calculating the costs of the factory's products. . . . . The differential rents which are surrendered take effect as costs."—*Ibid.*, pp. 209–10.

by the uses that could pay higher prices. Building iron or railroad iron is not fixed in price as a cost by jack-knife iron or iron-tonic uses—though the consumption of any one use does certainly affect the supply and the price for all other uses. The Fetter-Boehm-Bawerk doctrine, that the price in the marginal use for one variety of product derives its significance as cost from its potential use in some displaced—non-actual, alternative—product, is, however, not quite so seriously defective. This view is, in substance, nothing more than an opportunity-cost doctrine applied to production, regarded in the large. Products cost other products—as sometimes, truly, they do. But suppose an agent or instrument can be used in only one particular line of production, the line in which it is actually used, as, for example, a salt marsh for the production of marsh hay, or an iron mine for producing iron, or a spring for its product of medicinal waters. In the sense of the Fisher-Boehm-Bawerk-von Wieser-Mill-Jevons-Patten-Hobson-McFarlane analysis, the products in any of these cases impose no costs—at all events, no costs attaching to the use of the agent in question—precisely because the agent has no alternative use. So, then, the prima donna's services should impose no costs except to the extent of her possible wages (or product) as a servant girl or cook. All specialized skill (or the differential wage paid for it, or the differential product of it) must disappear as a cost. It must follow that no employer can determine how large his cost really is, or has been, or will be, till he can know what his various employed agents would have cost him if they had not cost him so much. What, also, will happen to this analysis if the stock of any cost agent consists of only one item—a situation where non-marginal uses of other items cannot bear to explain the cost in the actual use? It is, however, still true that the doctrine of a displaced alternative use may be said to apply, for whatever it is worth, even though there remains no room nor place for any *marginal* determination. The fact is, simply, that this sort of analysis—not original with Fetter, or for that matter with Boehm-Bawerk, or with anyone else in particular—is merely the result of the confusion between the social and the competitive points of view. The salt marsh or the iron mine would cost a collective

society nothing, since nothing else could be had from the marsh but grass, or from the mine but iron. The use of the instrument for its unique adaptation displaces nothing else. Costs attach solely to the other factors employed. Landwise, there is no resistance or debit against the securing of the particular product.

But quite other is the situation where cost is taken to indicate the total of the resistances which the entrepreneur must meet in his process of providing products for sale—those costs that the selling price must recoup if he is to furnish product—the necessary indemnity for his production. He must meet the competition of other producers and pay the expense costs that their bidding imposes. The rental costs of tobacco land or truck land are, therefore, not what the lands would yield in corn or wheat production, but the rent which the land does actually command as tobacco land or truck land. The wage cost imposed in hiring a carpenter is what he actually gets and not that smaller sum that he might earn in, say, a furniture factory. On terms of any other notion of cost than this, there must go an entire abandonment of the notion of competitive cost—the only cost which actual affairs present, cost as the entrepreneur computes it in finding the lowest price at which he can afford to furnish supply.

This blunder of injecting the social category of cost into a competitive analysis, with the result of making the entire competitive analysis nonsense—this entire misconception of the meaning and bearing of opportunity cost in the competitive sense—makes both interesting and instructive Fetter's pronouncement that "*alternative cost*, called by some opportunity cost, ... an option relinquished . . . . the most important excluded option . . . . like psychic cost, is individual, and is significant at the moment of choice, but is not the measure in which business outlay is expressed. . . . . In business . . . . cost of production is money cost . . . . merely the sums of money paid out by the producer" (p. 350). So, if one were to ask the cost of a crop of wheat to the cultivating owner of a farm—the resistance in terms of money to be overcome, the necessary indemnity, the minimum

selling price at which he can afford to furnish product—no alternative possibilities in corn or grass or milk or beef, but only the money outlays could bear upon the case. And this is the doctrine of an economist whose special merit it purports to be that he has discovered choice as the fundamental fact in value; whose field of authority is psychological economics; whose pride it is to have discovered choice as the clue to economic truth; who has presented this discovery not merely as the first and last word, but practically as the sole word of a value system; who has declared specifically and often, for example, that

"the basis of value is conceived to be the simple act of choice" (p. ix)—"valuation simply the resultant of choice" (p. 18) and "fundamentally a reflection of the individual choice" (p. 19); that "throughout we shall connect the idea of value with choice" (p. 25); who finds no value—nor even desire—but where some desire goes frustrate by displacement; who finds that the "excluded seller . . . . retains the good because his desire for it is stronger than his desire for the price . . . . The excluded buyer . . . . values the price more than he desires the sale-good" (p. 68); that "the capital investment, in shop, tools, materials, ... comes to be estimated by comparison with alternative contractual incomes"; and that "a shopkeeper who clears $1,000 in the year . . . . , having an offer of a permanent position at $900, counts that he is making but $100 on his capital" (p. 323). "Sacrifice is involved in every choice, in every price in barter or sale" (p.123). Precisely where indeed, could cost be imagined to be relevant to supply and to price, unless it were "individual . . . . and significant at the moment of choice"?

Foregone production has, in truth, its main significance with reference to profits (entrepreneur's labor-income) in arriving at those profits which, as *necessary*, must be included within costs. Not rarely, however, lands or instruments impose costs somewhat in excess of the actual hire. If, for example, a tenant at an annual rental of $100 could make the land pay him $102 in wheat, but yet, in place of wheat, could raise corn at a return of $103, the land cost of the tenant is obviously more than the outlay for rent. At less than $102 of return in corn he would abandon corn for wheat. At $103 of land return, there is a surplus above cost of only $1. Hence $102 is the necessary, the minimum, return wisely to be accepted in the growing of corn.

Having now at some length traced the steps by which Fetter has derived *market value* from *value* in the sense of *serviceability*, through *value* in the sense of marginal serviceability, thence through value in the sense of *relative marginal serviceability*—with little more than the barest suggestion of those influences which, through the limitation of supply, are effective both to condition and to determine desire (p. 37), and marginal desire (p. 36), and marginal valuation as interchangeable with marginal desire (p. 36), and marginal valuation as a choice between marginal desires (pp. 15, 355), and having in addition examined the methods by which cost of production purports to be resolved into mere displaced (or alternative) desires, we are finally ready to examine those aspects of Fetter's work for which his long and fruitful studies have especially fitted him—to which, also, his constructive effort has chiefly referred—and in which his services to the science have been especially great, their significance recognized, his authority respected, his leadership accepted and followed. To no student of the theory of interest can Fetter's earlier work have lacked instruction and inspiration. By equal title, also, the later development of his thought will command the most careful and interested attention. It is, then, to be understood that all of Fetter's analysis in his present work is essentially tributary to his interest theory, leads up to it, centers about it, or is derivative from it.

Tried by this test, the foregoing criticisms are more or less aside from the purpose. If his general value analysis is inadequate as preparation for his special problems of interest theory, the interest theory itself need not thereby be the worse, but only none the better. In truth, his confusions and ambiguities of terms serve to make his value theory not so much incorrect as indeterminate or unknowable—good or bad accordingly as the interpreter is sympathetic to report each item in the flux of terms in its most favorable significance, or is shrewd to infer constructions of error or contradiction or nonsense. Almost anything is possible to almost anybody in a discussion in which half a dozen different terms are used in as many different senses.

So far, however, as any confident interpretation is both fair and possible, Fetter's value theory amounts, as we have already seen,

to a reasonably consistent and systematic Austrianism—the emphasis upon utility or demand rather than upon pain or cost; the prices of products derivative from the utility or the marginal utility of their products; cost of production the effect of prices rather than the cause; distributive shares the apportioned fractions out of a jointly produced price product; costs of production merely the intermediate stage in the process by which the values of products are reflected back to the things that have produced these products; cost, therefore, standing as merely the marginal utilities that have been in the particular process, displaced, sacrificed, foregone. Nor is there any logical or other difficulty in this procedure, if only somehow it were really possible to begin with values as the starting-point—where value is understood as meaning only one thing, a price upon a final product, rather than as, now and again, desire, or marginal desire, or comparison of desire, or a comparison of marginal desires, or a choice between compared items, marginal or other. If, indeed, these ultimate prices were self-explaining, or could be satisfactorily accounted for through reporting them as due, in some large and general way, to the outworking of the choices of man as consumer, or of various men as consumers, or perhaps, in addition to all of these, to the choices of different buyers and sellers trafficking for commodities, or even inclusive also of different producers at different stages of the productive process variously devising to the end of the gainful selling of one thing and another—if this were really a competent value theory, it would do to start a distributive analysis upon the basis of all the market prices of products assumed as given. Thereupon all things else—supplies of intermediate goods, their functions as cost items, and their hires as distributive shares—might be reported as derivatives or results. Unfortunately, however, neither the facts nor the logic can start so. The solution of a problem is not the point from which to set out to solve it. It is only in a circle that one's goal is one's place of beginning. The explanation of prices by costs the Austrians rightly denounce as offering one price as the explanation of another. But to explain costs by prices is open to the same objection. To explain the prices of products by the marginal utilities of the cost agents instead of by the prices of these agents is to substitute irrelevancy for

circuity. To make the marginal utilities of the costs interchangeable with the price of the costs is to indulge in sheer hocus-pocus—mere logical legerdemain. Real explanation is still to seek. Nor is it to furnish a satisfactory explanation to establish merely that somewhere within the facts an explanation is hidden.

It will almost go without saying that, in Fetter's interest theory, there are contained the confusions of terms—and possibly of concepts—which have already been noted. Time *value* is one aspect of *value* in general: "According as our attention is attracted toward the one or the other *quality*, we speak of stuff-, form-, place-, and time-*value*. . . . . Fruit on the table makes a certain appeal to us, is *valued*, as compared with anything else, ... partly . . . . because it is available at the present moment rather than at some future time" (p. 235). This looks as if it were possible to discount future desirednesses into present money worths—as if a future good were necessarily a future value out of which somehow by discount to derive a present value. But here again the facts upon which Fetter relies may not necessarily fail him. Remoteness in time does affect present worths sometimes and somehow. There is the phenomenon of "time preference," and it affects the exchange relations of goods. This much is clear, however one's terminology may confuse it, or may misstate the associated facts. Undoubtedly "the timeliness of goods is an ever-present factor in their valuation, and often it is of the very greatest significance" (p. 236).

But it is directly and immediately by the bearing of this element of time upon the desires for goods that Fetter constructs and substantially completes his explanation of interest. Instead, this fact is actually his problem—how and why do future prices get their actual market present worths of price? Were, indeed, interest the mere fact of time-preference for a present good over a future good, were it actually the phenomenon of the premium of some goods over other goods, rather than of some dollars, present dollars, over other dollars, future dollars, the fact of interest and of interest rates would present itself as something else than what it

actually is. Interest, as the affairs of economic life actually present it, is merely a percentage of money premium in rendering present dollars over into future dollars, or of a money discount in rendering over future dollars into present dollars. And were, indeed, the actual interest fact a case of mere time-preference among goods, it would stand as greatly important that "we sometimes, indeed very frequently, prefer to have certain things in the future" (p. 237); and the explanation for interest would really sum up in this—that wherever there emerges the interest phenomenon, human beings must, in the large and in the average, be not of this future-preferring sort.

Fetter, indeed, does occasionally brush upon the actual fact that interest is a money premium in favor of present over future money, but only to shy away from it. He is sure "that present goods of specific kinds are sometimes valued less than like goods later." The denial of this, "the erroneous idea . . . . that present goods are always worth more than future goods of like kind and quantity . . . . results from thinking in terms of money, the loan of which in a developed money economy comes to command a general prevailing premium. . . . . But . . . . the typical or average preference of men . . . . for present goods or uses . . . . seems to be a fundamental trait of men . . . . rooted deep in man's biologic nature" (pp. 239–40). Interest is, therefore, presented as itself the demonstration of the fact that "powerful and universal influences work in favor of present gratification," and that only some other less powerful and general human traits, "imagination, reason, habit . . . . a strong will to pursue a distant object, hold this influence in check" (p. 240). Man is different from the insects or the squirrels, with whom "the storing of food is an act of instinctive choice . . . . even where the least forethought would show the futility of the process. But in man . . . . forethought and reason," etc. (p. 240, note). Apparently, then, saving takes place, and interest is explained, not through man's instinct to save—which, unlike the bees and squirrels, he utterly lacks—but by his instinct to consume, tempered, however, and controlled by a provident rationality, which rationality in turn, these others, unlike him, entirely lack.

And so, indeed, may truly be the case—or may not. At all events, these are dangerous assertions and assumptions on which safely to construct a theory of interest. Fetter would perhaps be wiser to confine his attention to his actual problem—why in a human society, under competitive institutions, money loans command their rate or rates of money interest. His speculations about bees and squirrels are even more gratuitous than are his declarations about the human equipment of instincts unsafe. If it be true that in the developed money economy, money loans gain a generally prevailing premium, this is the fact to be examined and explained. It is not to the point to set about explaining why this might not be or would not be the fact under other human conditions or with other orders of life. After all, what do we securely know about what would happen in some one or other human society that we can never have observed? We have no other actual society than the society which we are in—a society in which interest is a pecuniary phenomenon.

Nor, even for Crusoe, as different from squirrels and bees, would it be safe to assert that interest would and must arise. Much might depend, it may be surmised, upon the climate and other productive habits of his island, on his peculiar disposition, and on the qualities and methods of his savage neighbors. Sufficient unto each problem is the burden thereof.

The seeming goal of all Fetter's interest analysis is to establish the thesis that interest—money interest, presumably—is dependent upon the preference for present consumable goods over future consumable goods, is adequately and exhaustively explained by this preference, and is the expression always and everywhere of the rate of this preference—a purely psychological theory, in the sense either that nothing more than psychology is necessary to explanation, or that all influences bearing on the determination of interest rates must finally sum up in influencing the psychological perspective.

In a certain sense—in the sense that all influences must manifest themselves through their bearing upon human activities and choices—this view may be acceptable. But whose perspective is in

contemplation? Society's? Lenders'? Borrowers'? People's in the average? Each individual's? At all events, the ultimate issue is safely to be taken as that of the bearing of the technological uses of capital goods upon the rates of interest on money loans. Fetter, if I understand him rightly, denies that there is such a bearing; rather is it true that the rate of time-preference determines what technological or instrumental goods shall exist or be employed. If the indirect process yields a rate of income as high as the rate of time-preference, the indirect process is possible—otherwise not. But it has no bearing to affect the rate of interest: "The rate, as it falls to 9, 8, 7, etc., *dominates* the choice of technical processes" (p. 253). "There is . . . . a relation between roundaboutness and time-preference, but it is one in which the mere mechanical method is passive and subordinate to human choice, time-preference" (p. 261).

It is, indeed, true that one hires funds only when the increment of gain from the use of the funds promises a net balance over the interest charge. The rate appears to stand as an open offer for anyone to accept or to reject, as may seem wise. But is it, in point of fact, true that this absorption of the funds by any borrower—the wider market for the funds, the larger use which a fall in the rate permits—has no bearing to cause a rise of the rate or to mitigate the degree of its fall? Is the buyer of apples at the going price irrelevant to the fixation of price—merely passive—the producer at the going price ineffective through his product to affect the price? Verily, if this is the issue, it may be easily resolved.

Professor Fisher's view goes not so far as Fetter's. Like Fetter, Fisher purports to talk in terms of the exchange relations between present goods and future goods, rather than in terms of actual exchanges of present money against future money—a relation in which, e.g., an interest rate of 5 per cent per annum means merely that $100 of money today exchanges against $105 of money a year from today. But Fisher admits that the technological openings for the uses of loanable funds do affect interest, but only by making present consumables the more scarce or the less plentiful, and by making future consumables more plentiful

or less scarce and so affecting the relative volumes and the relative importances of future and present *goods*.

No serious objection, for present purposes, is to be made to Fisher's view. It is, however, not true that interest can emerge only where present consumables are inadequate for present needs, or where, through substitution for future purposes, they are made less adequate. The interest contract may present nothing more or other than a choice between two future incomes, no question of the present enjoyment of incomes possibly entering the case. Shall I sell to X my farm on terms of receiving payment of principal and interest at the end of a year, or shall I work the farm myself, and at the end of the year have it, together with its income, as against the money promised through the sale of it? All rental relations are susceptible of translation into capital and interest terms. Is it possible to say that always in the renting of property there is a choice of present income streams as against future income streams? In most cases the possession of a lendable thing presents merely the question whether the owner shall at the end of the year have an increase in actual product as against the money increase paid for the direct use of the thing. True, the owner of lendable property may sell it—if he prefers and can; or it may be that, by limitations of law or of market conditions, the good is unsalable or unwisely to be sold, and yet is lendable.[1]

[1] My colleague, Harry G. Brown, suggests the following illustration: Suppose two men, A and B, each with a farm with an annual productive power, as each farm is used, of 1,000 bushels of grain—A's farm, however, capable of producing 1,090 bushels with the addition of an implement costing a year's work and lasting 20 years; B's farm capable of producing 1,100 under the same conditions. A has full provision of consumption goods for all his wants for a year ahead; B has not. A works a year making the machine for B. B agrees to pay A for the machine 95 bushels a year for 20 years. A may conceivably choose among four possibilities, viz., (1) more present goods—which he does not want and which, therefore, he cannot be regarded as being paid to forego; (2) more leisure, which, also, he may not seriously contemplate; (3) an increase of 90 bushels a year for 20 years, from his own farm; and (4) a 20-year annuity of 95 bushels from B. It may well be that only the last two possibilities will be seriously considered by him, the third so completely outdistancing the first and second in desirability that he would surely adopt it if the fourth were not present. Then his insistence on payment of 90 or above is not at all due to any desire for present consumable goods, but is solely due to his ability to get an alternative future increase from his own farm. For B, also, the only significant choice may be whether he shall promise 20 future payments of 95 in order to command 20 future increases of 100.

Finally, however, Fetter arrives at the necessity of treating interest in the ordinary sense of a money payment on a money loan: "The price paid for time-transfers of many kinds can be much better expressed in a common standard by the use of money. . . . . Money kept for an hour or a day . . . . is serving the purpose of a *store-house of saving* . . . . a generalized means of abstinence, ... with time-value yet more important as money comes to be used more and more as a standard of deferred payments. . . . . It is the unit in which the comparison of goods is made when one chooses goods in different periods of time. . . . . Money is taken as the objective standard in borrowing and lending. . . . . This is to be treated under the subject of interest" (pp. 262–64). In actual fact, however, Fetter nowhere treats or discusses this thing that is essentially his entire problem—a problem to which all his other discussion is intended to be merely tributary. He gets no farther than occasionally to state the problem: "Interest is the amount paid and received according to a contract of credit given in terms of money. . . . . Interest is, then, always a price" (p. 301). But the solution of this problem of money interest upon money capital is left by inference to be derived from the general principles of time-preference for present goods over future goods. And yet, though one may borrow funds to finance a present consumption, and may later discharge his money debt through funds which were else applied to the consumption at that later time, the borrowing is more commonly for the purposes of plant, raw materials, labor, or equipment, or to renew existing indebtedness. So the funds with which payment is later made may be derived from the sale of something impossible of use as consumption goods. The problem of interest is, indeed, simple enough when so stated as to conform to the evident concrete facts: Why do money loans command a money premium? And the solution is necessarily sought along the lines common to all problems of market adjustment: What influences determine the offer of funds for loan; what influences are behind the demand for funds? Time-preferences for purposes of consumption are a factor in the demand, saved incomes a share in the supply. But inasmuch as other purposes enter into

the demand—loan funds absorbed in the erecting of plant, in the production or purchase of equipment, in speculative ventures, in advertising, in promotions, in buying or renting land, or houses, or furniture, or automobiles, in tax or insurance outlays, in manufacturing enterprises, in agricultural undertakings, in the waging of wars, in financing fiscal deficits, in the allotment of pensions and subsidies and sinecures, in shell-gaming of various sorts and phases, and so on indefinitely—it is futile to attempt to reduce interest to a mere computation as to the rate at which money for present consumables outranks later money for later consumables.

It seems, indeed, that the commonplace phenomena of interest rates in the world-markets should have offered Fetter a suggestion: "Temporarily, as in time of war, or in panic, the rate may become very high" (p. 271). But no one, probably, would affirm that these changes of rates express merely and report merely the fluctuating estimates of the relative importance of present to future consumables. The financial history of the past two years might also have served to drive home some theoretical lessons. Somehow, with an extraordinarily increasing pressure for loans for purposes of war, and with an unprecedented destruction of wealth, and with an unparalleled interruption and diminution of the current production of the world, interest rates have been phenomenally low. Consistently with his general view Fetter remarks: "That a great war, calling for much borrowing, raises the interest rate, is easily explained as the undoing of the process of saving and loaning. It presents a case of waste on an enormous scale. Waste and destruction are in their nature and in their main effect upon time-preference, interest, and productive processes, just the reverse of saving and improving wealth. . . . This result is anticipated at the very outbreak of hostilities. The interest rate rises, and the capital value of all securities with fixed incomes is reduced accordingly. During the continuance of the war, the rising interest rate slackens investment in industries in countries at peace" (p. 498). But obviously the facts do not fit easily to this interest theory as presented. Plethoric funds and low interest

rates have prevailed in the warring countries and in America, ever since the early days of 1915.[1]

The truth is, however, that it is on the side of supply of loanable funds rather than of the demand for them that Fetter's interest doctrine, like most other interest doctrines, gets seriously into conflict with the realities of the situation. Strangely enough, Fetter has constructed a theory of interest, and, indeed, a theoretical manual of political economy as a whole, with only incidental and occasional reference to the phenomenon of money, and with less than this to the institution and the activities of banking. And yet it is by the banks that most of the supply of loanable funds is furnished as it is to the banks that borrowers most commonly apply for so-called capital. The fixation of interest rates of any particular time is largely, even exclusively, a banking phenomenon—the fluctuation of rates almost entirely a matter of banking activity and policy. The circulating medium, the thing that is borrowed, is mainly of banking origin; the expansion or the contraction of the circulating medium mainly due to the extension or restriction of banking accom-

[1] The following are typical items out of a general situation familiar to all observers of recent financial phenomena:

"The bond market is active at prices that are 4 per cent to 6 per cent above those ruling six months ago. Such cities as Kenosha, Wisconsin, for instance, have been able to sell their 4½ per cent bonds at a premium."—*Commerce and Finance*, December 1, 1915.

"A remarkable advance in the prices of bonds has occurred during the last two months. . . . . The average gained nearly three points in October, and nearly four points in two months. The advance has continued since November. In view of the unparalleled war demand for capital, this advance in the prices of our railroad bonds is surprising."—Market letter, Warren W. Erwin & Co., November 12, 1915; see also the *Annalist* of November 29, 1915.

The *Annalist* of January 31, 1916, points out that the twenty-five-million issue of fifty-year bonds of the state of New York has been selling at a price to yield the investor 3.85 per cent, and notes the general trend of bonds toward rise.

See also Table VIII in W. C. Mitchell's "American Security Prices and Interest Rates," *Journal of Political Economy*, February, 1916.

The February, 1916, *Bulletin* of the National City Bank of New York remarks: "Interest rates are still dragging on the ground, ... a situation comfortable and pleasing to borrowers. . . . . The money market has been very narrow and quiet, with call money at 1¾ to 2 per cent, and best names in commercial paper usually at 3 per cent."

modations. Capital is furnished to the business man by the loan to him of the banker's credit. The derivative funds as they fall into the hands of individuals disposed to lend them are ordinary loanable funds—originating in the lending activity of the banks —are capital to the borrowing customer, and are funds which are capital assets to any holder disposed so to employ them. It is commonly with easy reserve conditions with banks, reserves derived in large part from the discounting activities of still other banks, that the offer of funds becomes greater and interest rates lower. Or again, there is a restriction of lending with a resulting rise of rates. The high interest rates of panic periods have commonly no other explanation. The analysis of interest without attention to the phenomena of banking is a predetermined disaster —or better, perhaps, an unintentional farce, a play of Hamlet with no Hamlet. The bankruptcy of interest theory on these terms has received a year-long and a perfect illustration in the world-situation since the European war began—first, the exceptionally high rates, with now over a year of extremely low rates, even bonds rising; credit easy in Europe as in America, lowering rates of return upon the present worth of all investments—and still with abstinence and consumption perspectives as the offered solution for these phenomena—and therewith economic authority and theory a joke and a byword.

It may, indeed, be true, that rising prices may finally cancel the effects of banking activity upon interest—they probably will— unless under the current conditions of suspended redemption, banking activities continue to expand.[1] Or perhaps the next thing may be a long period of extremely high rates. Such will be the case whenever, if ever, the banks shall set themselves seriously to the task of re-establishing gold redemption, and to this end shall adopt a policy of forcing the liquidation of loans with the attendant

[1] In America, at any rate, interest rates may long continue low, deposit currency continue to expand, and prices continue to rise. "In spite of the growing expansion, excess reserves continue to grow even faster."—Federal Reserve Bank of New York, as quoted in the *Annalist* of February 21, 1916.

"The increase in deposits [of all national banks] during the twelve-months period was $2,163,000,000."—Comptroller Williams as of December 31, 1915. See *Journal of Commerce* of February 23, 1916.

contraction of circulating deposit credit. In that case a further disaster will befall the abstinence and perspective theory of interest determination. Every panic quite clearly presents the same problems and enforces the same lessons—less obtrusively and cogently, every period of speculative expansion and every active, but easy, credit market. Yet Fetter has no discussion of monetary theory or of credit and banking.

Closely articulated with Fetter's interest theory should be his concept of capital. What, then, is *capital*? Clearly it is an individual and competitive and pecuniary fact.

"The capital concept is essentially of this private and acquisitive nature" (*Journal of Political Economy*, XXII, 554, June, 1914). "One may be a very rich man today and not own outright, in fee-simple, any but small personal belongings. He does not own wealth in the old-fashioned way, he has *capital* and he is a capitalist . . . . *capitalis pars* the chief part, principal part; hence *principal*, of a money loan. The capital, or principal, of the lender was this amount of money. . . . . The borrower on his part looked upon *the capital* as the amount he had to invest in various kinds of goods. Taking these goods to a distant market, or changing them by manufacture into more valuable [higher-priced] forms, he expected to regain when he sold them not only his capital [money must be meant], but more than enough [money] to pay the [money] interest. . . . . Capital is an expression of a person's business power in terms of money. . . . . A promissory note . . . . is capital. . . . . Business or industrial capital is . . . . that part invested . . . . from which to draw a monetary income" (pp. 266–67). "Enterprise is investment, the putting of capital into concrete [?] forms of wealth" (p. 350). "The owner of a fund of purchasing power cannot leave it to invest itself. The primary function of enterprise is the choice of a business in which to invest" (p. 327). "Frequent use must be made of credit" (p. 334). "The value [price] of his house, furniture," etc., "is capital. . . . . In an emergency they may be converted into money" (p. 267).

Now it may perhaps go without saying that I accept this view of interest and capital with enthusiasm. If it is original with Fetter, so much the better—if, indeed, it matters at all. The sole regrettable thing is that Fetter has no way, or at all event finds none, of connecting this admirable concept of capital with his theory of interest. Once starting, however, with this concept of capital as a money quantum and of interest as a money premium on

a money loan, he should have been well advanced toward a solution of the interest problem. A question rightly stated is half solved.

In line with this monetary concept of capital Fetter offers as "another way of defining capital, ... any right to prospective income that can be capitalized. . . . . The value [price] of a slave may be capital. . . . . To a limited extent, carefully guarded by law, a man may borrow and pledge future earning power, and thus capitalize it" (p. 266, note). "The present price . . . . is the capitalization of the expected uses [price incomes]" (p. 269).

But still Fetter does not attempt the necessary connections; in fact he often slips back into another and earlier concept of capital. He rightly finds that goods get present worths through the process of capitalization—as surely they do, though not by a process quite as precise and mathematical as Fetter reports it: "Each succeeding year's use [money-valued] . . . . is reduced to its present worth [in money] and the sum of the present [money] worths is the present value [price] of the agent" (p. 268). Now there is no need to question—no need for me, at any rate—that farms, franchises, houses, furniture, machines, are all capital; but they are not that form of capital presenting the phenomenon of capital borrowings and interest. The demand for capital expressed in terms of interest paid is a demand for loan-fund capital—money or its equivalent, fluid purchasing power. It is, then, clear that in the following quotation Fetter is talking of capital in the sense not of a money quantum lent and borrowed but of a concrete good that is sold and bought: "Every exchange of a durable agent involves an estimate [at least two estimates] . . . . of that agent's future. . . . . In all this bidding for capital the logical basis of the present value [price] is the series of expected incomes" (p. 271). But suppose now that we attempt to make capital mean here a money fund and adapt the sentence to this meaning: *In all the bidding for money funds the logical basis of the present money quantum is the series of expected money incomes from the money.* Fetter is merely playing hide-and-seek with the concept of capital in its relation to interest. And so he continues: "When the agent is bought outright, the very concluding of the bargain fixes [expresses?] a relation between the expected value of the income [expected price income] and the

value [price] of the capital invested. The discount on the future incomes . . . . is *involved* in the lower present price" (p. 271). But it is in the next paragraph that war and panic get brief mention, as disturbers of the interest rate.

But in the next chapter the money character of loan capital comes to the surface again with the discussion of the phenomena of saving and borrowing. After the statement that "abstinence is the name of that faculty of the mind [rather than an activity or a decision of the mind] which enables present desires to be subordinated to future desires" (p. 285), we shortly find that abstinence takes place in view of "those who are spending more than their incomes, those who are spending just up to their incomes, ... and those who are spending less" (p. 287). "Both of the poor man's opposing desires, dependent on the dollar, may be very strong . . . . the rich man's desires . . . . very weak. . . . . Saving may result" (p. 288). It must, then, follow that the saving of funds, or the bidding for them, or the rates fixed for them, can never be explained by utilities or abstinences taken quantitatively, but only as somehow regarded as ratios, and that no price or value and no interest rate can ever express desire or marginal desire or marginal impatience or any other purely quantitative fact. But however this may incidentally be, Fetter's notion of that kind of loanable capital that comes from savings runs quite obviously in pecuniary—price, money—terms: "Every clear dollar of money income . . . . is disposable either as present enjoyment or as savings to constitute a new capital" (p. 289). In a note, he mentions "reservoirs of small savings . . . . savings banks, building and loan companies, postal savings, insurance" (p. 290), totaling $11,195,000,000—capital, one infers. So again: "The term productive loan . . . . applied to the borrowing of capital to be used . . . . in business . . . . must be more fully discussed in connection with the problem of enterprise and profit. . . . . The borrower expects to pay the interest out of the surplus income" (pp. 298–99).

And finally something further deserves attention: Fetter notes "that the owner of a fund of purchasing power cannot leave it to invest itself" (p. 327). "Frequent use must be made of credit" (p. 334). "The money which the enterpriser, ... the so-called

productive borrower, ... borrows to invest in business, he uses to get better machinery or a larger stock, with which to secure a better or a larger product . . . . the price of these goods to control which is the real object of the loan. . . . . The loan is made in view of the rate of interest, of the market price of the goods in which the loan will be reinvested, and of the probable chances for earning profits" (p. 335). "The rate of interest is taken to represent about what capital can do by itself" (p. 345).

Is it not now evident, in view of all these absorptions of saved money funds by borrowers, "for use in carrying on business, either mercantile or manufacturing" (p. 299)—for buying equipment, raw materials, land, fertilizers, for financing advertising, paying rents, insurance, interest-charges—that the wider the field of use for funds, the more factories and railroads to be constructed on borrowed funds, the larger the stocks of merchandise carried, the more extensive the publicity campaigns to be attempted—the less rapid can be the fall of interest rates at any time through increasing supplies of savings? That with new demands for funds emerging more rapidly than new supplies of savings (and of bank loans) are offered, these new business and industrial openings for investment must force a rise in interest rates? That it cannot be true that "there is . . . . a relation between roundaboutness and time-preference, but it is one in which the mere mechanical method is passive" (p. 261)—the process not solely that "the individual takes the market rate as a fact and adjusts his own conduct to it" (p. 312)? That whatever gain-offering undertakings absorb funds must affect interest rates? And equally true must it be that whatever business activities create funds, or at one time add and at another time withdraw funds, must also affect interest rates. And if this be true, Fetter's entire theory of interest goes into bankruptcy—irrespective of the rôle of banking in the case.

Something of the same fate also overtakes Fetter's capital concept, as earlier formulated by him—with the net result, however, of the great improvement of his concept in its later and present phase. In this later rendering,

"capital is the salable value-expression of expected incomes, no matter what the source of the incomes may be, whether rentals of vice, gains of monopoly,

mendacious advertising, or the growing scarcity of natural agents. To identify growth of capital with national prosperity is fallacious. Capital is a private business concept. . . . . Not without reason it has been a reproach to economic writers that they often have confounded business incomes (and especially those of a limited, influential class in society) with general social welfare, and have identified individual acquisition with social production. . . . . The right understanding of the nature of value and of capital makes possible a clearer distinction than before between business economy and social economy. Men cannot today . . . . cherish the error that 'whatever is, is right' in the distribution of incomes. We must recognize the fact that in all times and countries and still today there is in public and private business more or less favoritism, bribery, monopoly, and dishonesty, which give to some men more than the economic law of value would explain or warrant. . . . . Incomes resulting from values in the world as it is do not always meet an ethical test" (p. 512). "'Get-rich-quick' schemes mean get-poor-quick for everyone but their promoters. . . . . Lead mines and gold mines which prove to be salted mines, rubber plantations with elastic possibilities, electrical 'air-line' roads destined ever to remain in air—these projects yearly lure millions of small savings from the trusting" (p. 486). "Franchises . . . . enable their owners to get incomes which can be capitalized. . . . . When . . . . investors believe in the skill of the manager to influence the legislators by fair means or foul, the value of the stock continues higher. . . . . The important question, however, is . . . . whether the exceptional income arising under the franchise should go to the public or to the company, ... whether the company is entitled to the income, for if so, the capitalizing of the income somehow, as is done in every other business, is inevitable" (p. 282). "A prodigal . . . . is impatient at the slowness with which the incomes ripen . . . . often in a favoring atmosphere of flattery, vanity, and false friendship. . . . . To secure an immediate loan he lightly agrees to pay an exorbitant rate of interest. . . . . The net result . . . . is . . . . a wasteful transfer in which often scheming and avaricious men gain unjustly, and often the savings of true abstainers are transformed into riotous living and foolish display" (pp. 295–96; see also pp. 367, 368).

In this connection, however, must be noted how Fetter elsewhere presents the case: "Saving increases the bounty of agents, improves the methods of production, and benefits the community as a whole, including those who have had no part in the saving."[1]

[1] It is only fair to say that Fetter's present emphasis is noticeably less optimistic than in his earlier book. The following quotations from the *Principles of Economics* could, however, be easily defended by the citation of other passages asserting quite the contrary: "Goods consist of all those things objective to the user which have a beneficial relation to human wants" (p. 19). "Wherever free competition exists . . . . each workman is moving into the industry where he earns the highest possible

Fetter's earlier formulation of capital, it will be remembered, included all goods, present or future—all goods in terms of price. So, likewise, Fisher—both authorities taking the view that, inasmuch as all things in time are either present or past, the present a hair-line between two eternities, all services that are not past must be future. But Fetter now arrives at a view less logical, it is true, but far more psychological. He sees that, in getting future incomes into a present worth, it is really important to have a present. Capital is therefore "any right to prospective income that can be capitalized" (p. 267)—to which the capitalization process applies in getting a present worth. "If a technical process involving a half-dozen or more steps is completed within an instant, then the most indirect agent must have all the value reflected to it from the product, subject to no discount on account of the lapse of time. . . . . The man can get the nuts by climbing the tree, or by taking a stick and knocking the nuts to the ground. The difference in time . . . . is negligible. . . . . If sticks are scarce, ... that is a usance problem, and not a time-value problem" (pp. 258–59).

On the whole, then, I regard Fetter's present notion of capital as eminently satisfactory. He needs merely to see that interest has

amount, and where he receives just what his fellow-men estimate his importance to be, judged by the service which he performs. Each man's place is determined by his specific gravity, just as the place of liquids poured into a glass is determined by their density" (p. 213). "There is a constant selective process; dropping out the weak and advancing the efficient organizer. . . . . After manifold blunders, the less capable drop out. Thus by the ceaseless working of competition the higher places are taken by those most capable of filling them, and the efficiency both of the employers and of the workmen is increased" (p. 271). "Profits are the income attributable to the enterpriser's services . . . . *economic* wages or the earnings of services" (p. 284). "As industry develops, this special service stands out more clearly" (p. 285). "He is the spring or buffer which takes up and distributes the strain of industry" (p. 287). "Cheating, lying, breaking of contracts, bribery of public officials . . . . are not profits, as the term is here understood . . . . . Economic analysis may exclude from the concept of profits the gains made by such means" (p. 289). "Profits being recognized as due to these differences in the abilities just as rent is due to differences in the fertility and efficiency of goods" (p. 290). "The enterpriser dealing with real wealth, and fitted to take the risks . . . . needs the motive of gain, and in a sense can be said to earn socially what he gets" (p. 336). "In a broad but very true sense, therefore, it appears that high personal achievement, large economic reward, and large social service are connected" (p. 379). "The use of wealth in these days is taking more social directions" (p. 390).

to do solely with a particular subdivision of private capital, the loan-fund variety of capital. And often enough he does see this well and clearly, only that he makes nothing of it for purposes of interest theory. True, "the principal is the amount loaned expressed in dollars as a capital sum" (p. 302). True, "interest is the amount paid and received according to a contract for credit given in terms of money" (p. 301). True, "the thing rented [is] a stated amount of money . . . . and the rent (interest) . . . . a smaller amount of money" (p. 302). True, "the expression of interest as a rate per cent of the principal gives to the interest problem an aspect very different from any presented by the rent problem" (p. 302). True, "money borrowed to keep would be barren; . . . . it would even cease to be money" (p. 308). True, the borrower "is . . . . selling to the lender the right to collect a series of future money incomes . . . . and is in return buying a present sum of money" (p. 309).

But what of it? Nothing more than that Fetter has earlier denounced this loan-fund notion when used as "the central fact in the interest theory. . . . . It is a proposition worthy of John Law that the loan-fund consists in the obligations of prior debtors. . . . . Law was Scotch . . . . this . . . . Hibernian. . . . . The author . . . . hit upon . . . . the error . . . . so manifest . . . . in considering the always puzzling part that banks play" (*Journal of Political Economy*, XXII, 556–58). Whether, however, Fetter in his present capital analysis now agrees with me or I with him, is a question which deserves neither his attention nor mine—still less that of anyone else.

Much the same commendation—and the same annotation—applies to Fetter's discussion of the law of diminishing returns, the law of the proportion of factors, "the principle of proportionality"—with occasional confusions of the competitive and the social renderings (e.g., p. 163)—the law of economy in large production, the relations of complement and substitution between factors, and the importance of reservation prices. With reference to this last, however, I have difficulty in reconciling Fetter's contempt for reservation prices, as expressed in his earlier-cited review of my *Economics of Enterprise*, with a paragraph on p. 57:

"An auction is advertised to be 'without reserve' when everything is to be sold for the highest bid, no matter how low it is. . . . . Price in such a case may be abnormally low. . . . . Buyers' bids alone then determine the price at anything above zero. In most cases of trade, each trader virtually stands ready 'to bid in' his own goods. . . . . In some cases friends or confederates, 'cappers,' make pretended bids, or sometimes bid in the goods . . . . if the price is too low. We have in the auction-sale . . . . something near to the idea of a *market*." "Where the owner can himself manage the farm, he has a reserve valuation below which he will not let it to any tenant. . . . . The owner's reserve valuation may often be below the bid of others" (p. 165). "Price in such a case may be . . . . much lower than in a trade where a lower limit is set by the ability and readiness of each would-be seller to keep all or part of the supply if the price is not as high as his valuation" (p. 57).

My own discussion of reservation prices has merely emphasized the fact that the refusal price is one demand among all the other demands bearing upon the supply. I don't at all know whose doctrine it essentially is, since it is implied everywhere in price analysis. It is quite consciously and effectively used by Wicksteed—just as certainly, only protestingly or unavowedly, by Fetter. In fact, however, Fetter especially needs the doctrine, since he translates all cost into displaced alternative products—with cost socially viewed.

But this review, intended as essentially an attempt to set forth critical and doctrinal issues, must somewhere reach an end—not, however, without a most cordial recognition of the surpassing merits of Professor Fetter's book in the clean-cut logic of its organization, the easy and attractive informality of its style, its wealth of illuminating illustration, the originality of its presentation, and the evident mastership of much of its analysis. Had I time, it would be a pleasure to indicate several of what I believe to be improvements in concepts and in terminology, of great suggestiveness, and promise, e.g., the restriction of *diminishing returns* to the purely social aspects of the relations between population and land; the definite meanings attached to *direct* and *indirect*, *consumptive* and *durative*, *present* and *future*, in the terminology of both the rent and the interest discussions. Again, as at length in other connections, I desire to express my recognition of Fetter's great services to the development of economics, and my many obligations to him for suggestion, inspiration and guidance. That I regard his work as

faulty in many respects, disagree with him at many points, take issue with him upon many fundamental questions, subtracts nothing from my cordial and admiring appreciation of his services and significance in the science, to the development of which each of us, I trust, is equally, in the measure of his powers, earnest and devoted.

H. J. DAVENPORT

UNIVERSITY OF MISSOURI

NOTE.—And now a few unwilling words. In the June, 1914, *Journal of Political Economy*, on substantially two grounds, Professor Fetter makes lengthy objection to the essential positions of my *Economics of Enterprise:* (1) that, in the main, these positions are borrowed from him; and (2) that they are for the most part incorrect. To his further complaint that in my borrowings, I have denied him proper credit, I can only answer (1) that since he has found my doctrines wrong—a matter of no small surprise and regret to me—it would have been equally absurd and unfair had I summoned him to responsibility for them; (2) that I had elsewhere given him his full meed of generous—and deserved—credit. The *Economics of Enterprise* was avowedly merely the systematic presentation of the positions of a parent volume. In my *Value and Distribution*—a study critical and historical in emphasis—due allotment of credit and of priorities was seriously attempted, subject always to my expressed conviction that, after all, the truth rather than the personal ascription of it is the sole important matter. The quotations below will serve to make clear what I at the time regarded, and do still regard, as fairly and justly due to Fetter, together with my own position on all these priority issues—my title, Fetter's title, anybody's title. I disclaimed, and still disclaim, any in myself. And on precisely similar grounds I impliedly denied, and still do now deny, them to Fetter—or to anyone else—in any large way. Even if ever a controversy of this sort could be dignified, or less than an impertinence and a grievance generally, this one must remain absurd. Originality of doctrine, even of error, has become mere folly. The subject is too old, the masters too many and too capable, to leave room for more than addition or restriction, amendment, restatement, or reorganization. There is, I venture to say, no single doctrine in all the past fifty years of theoretical economics for which a reputable parentage could not be traced in earlier work. Unquestionably, at any rate, all my own views are of this highly moral sort—as, also, all of Fetter's.

In fact, of course, nothing of all this matters any way. Doctrines are neither the better nor the worse for their affiliations. I am glad merely that on so many issues Wicksteed, Fetter, and myself have arrived at what seem to me practically identical conclusions. I wish there were more of these agreements—and what there are of them more conscious and more cordial.

In the preface to *Value and Distribution*, having pointed out in detail how slender were any claims of my own to originality or priority—something, indeed, like two pages of disclaimer—I said, with especial reference to *capital* and to *interest:* "The competitive entrepreneur rendering of the capital concept was fairly well held as far back as the work of Say and Malthus; Clark, Fisher, and Fetter have contributed greatly to the widening of the concept of capital *socially considered;* Cannan and Veblen to the individualistic emphasis. . . . . Interest theory, in that formulation which, by title of adequate recognition, systematization, and development, Fetter has rightly made his own, is traceable at least as far back as Say; was adequately formulated—but the result of it unseen—by Wieser and by Clark, and was by the latter valiantly battled for." And in the body of the book (pp. 98, 104, 116, 207, 208, 212, 315, 383, 497, 532, 559) Fetter's doctrines and services came in for discussion. In the chapter, on "Capital and Interest," I pronounced Fetter's criticism of Boehm-Bawerk "most searching and destructive." I added that "it would be hard to separate from the discussions of the present text that which is due directly to Professor Fetter and that which belongs to the author. But, in the main, so far as the present discussion is not directly borrowed from Professor Fetter, it has been suggested by him. At the same time, it is fair to say that Professor Clark . . . . has, in essentials, anticipated Professor Fetter's criticisms. . . . . So far as refers to Professor Fetter's treatment of time value, ... the doctrine should, perhaps, be rather held to be that of Wieser than of Fetter, though here also Fetter's discussion, in its development of the principle and in its consciousness of the significance and extent of the principle, is by much to be preferred. . . . . I have made no attempt to trace the doctrine back to its origins; sympathetically interpreted, Say, at any rate, appears to contain it." And again, with regard to Say and in connection with the same problem: "This, it will be noted, is the view in support of which Professor Fetter has marshaled all the resources of wide historical research and of keen theoretical analysis. It may now be hoped that this truth, having so long awaited its second statement, may, in its later and more scholarly presentation, have the good fortune not to be again forgotten."

But entirely irrespective of this general point of view, I find Fetter's strictures and complaints incredible. In his *Principles of Economics*, he gave substantially no credit; in this present volume he gives even less. Nor does either of these books have, or purport to have, a parent volume. Perhaps in neither case was there a duty to award priorities or to allocate proprietorships. I don't see that there was. I am not sure that such a duty would have been mine in the *Economics of Enterprise*, even had *Value and Distribution* not already appeared. But that it could have been due from me in the *Enterprise* and from Fetter in neither of his treatises, I do not easily comprehend. I gave, he says, "the meagerest hint of previous writings, and often no hint whatever. . . . . Such a standard of scholarship is to be condemned, for without

conscientious references, essays in the field of controverted doctrine can attain but little of their possible service; . . . . neglect and unconscious misrepresentation . . . . the cut direct to those American economists who have for two decades been developing a progressive economic theory."

From Fetter, such words; and yet, in his present volume, Carver, Fisher, Johnson, Whitaker, Wicksteed, Marshall, Landry, Boehm-Bawerk, Von Wieser, are not even mentioned, either for praise or blame, Clark, and Commons appearing only once, each with qualified dissent, Cannan once with clear approval.

But still more strange: My views, as he summarizes them, "seem," he reports, "to make Davenport a progressive in relation to the revision of fundamental theory now going on in America"—only "that these ideas are presented as if they were almost novel . . . . ideas which have become pretty familiar to most American students. . . . . They are mainly in accord with the opinions held by members of the psychological school . . . . [but] no clear references anywhere to the movement of thought of which the present book is but a part."

And now note: "But for this [the "cut direct," and "the chiding spirit"] I should point to the present book as in some respects a further fulfilment of the forecast in my paper of the year 1900. There are many of us who should like to agree with the main features of the author's argument. We should like to greet him as one of 'the moderns,' but he passes us by; . . . . his outlook is lonely"—and all this not as a joke as to methods of doctrinal classification, but in full seriousness, and as certifying himself as a person to whom there attach no "standards of scholarship to be condemned."

In bringing this note to a close, therefore—the necessity for which, making whatever best I can of it, I deeply regret—I am glad to repeat and reaffirm all my earlier words of due appreciation, appending, however, only the wonder whether Fetter anywhere ever did by another the thing which I fully and freely did by him—the wonder, also, whether there may anywhere be another than Fetter who, likewise, never having done the thing himself, could yet find it possible to arraign for remissness toward him the very man who had fully and cordially fulfilled the obligation.

Strange case.